# Differentiation

Official Organ of the International Society of Differentiation

Vol. 3 1975

**Editor**

Dimitri Viza (Paris)

**Editorial Board**

E. J. Ambrose (London)
R. Auerbach (Madison)
J. T. Bonner (Princeton)
J. Brachet (Rhode-St. Genese)
G. Brand (Minneapolis)
A. Braun (New York)
D. A. L. Davies (High Wycombe)
B. Ephrussi (Gif-sur-Yvette)
M. Feldmann (Rehovot)
W. Franke (Heidelberg)
H. Holtzer (Philadelphia)
N. K. Jerne (Basel)
C. Kafiani (Moscow)
T. J. King (Bethesda)
C. L. Markert (New Haven)
R. G. McKinnel (Minneapolis)
B. Mintz (Philadelphia)
A. A. Moscona (Chicago)
C. Pavan (São Paulo)
L. Philipson (Uppsala)
B. Pierce (Denver)
A. Ruthmann (Bochum)
S. Spiegelman (New York)
M. Sussman (Jerusalem)
S. Toivonen (Helsinki)
T. Yamada (Lausanne)

Published by Springer-Verlag Berlin · Heidelberg · New York

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publisher.

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Springer-Verlag Berlin Heidelberg New York
Printed in Germany by Carl Ritter & Co., D-6200 Wiesbaden
© by Springer-Verlag Berlin Heidelberg 1975

# Contents


**Allen, T. D.**, s. Potten, C. S. 161

**Bellamy, D., Hinsull, S. M.**
On the Role of the Reticular-epithelial Complex in Transplantation of the Thymus 115

**Bernstein, M. H.**, s. Gould, S. F. 123

**Brachet, J., Pays-De Schutter, A., Hubert, E.**
Studies on Maturation in *Xenopus laevis* Oocytes. III. Energy Production and Requirements for Protein Synthesis 3

**Collins, J. V.**
Secretion and Uptake of $^{14}C$ Proteins by Fat Body of *Calpodes ethlius* Stoll. (Lepidoptera, Hesperiidae) 143

**Connock, M.**, s. Sturdee, A. 43

**Flickinger, R.**
Relation of an Evolutionary Mechanism to Differentiation 155

**Gould, S. F., Bernstein, M. H.**
The Localisation of Bovine Sperm Hyaluronidase 123

**Harris, G., Walford, E. M., Olsen, I.**
The Effects of Thymidine and Its Analogues on the Differentiation of Antibody-forming Cells 99

**Hegre, O. D.**, s. McEvoy, R. C., et al. 69

**Hinsull, S. M.**, s. Bellamy, D. 115

**Hubert, E.**, s. Brachet, J., et al. 3

**Kaulenas, M. S.**, s. Unsworth, B. R. 21

**Kelley, R. O., Lauer, R. B.**
On the Nature of the External Surface of Cultured Human Embryo Fibroblasts: An Ultrastructural and Cytochemical Analysis Utilising Stain and Lectin Probes 91

**Klag, J. J., Ubbels, G. A.**
Regional Morphological and Cytochemical Differentiation in the Fertilized Egg of *Discoglossus pictus* (Anura) 15

**Lauer, R. B.**, s. Kelley, R. O. 91

**Lazarow, A.**, s. McEvoy, R. C., et al. 69

**Lewis, M. G., Rowden, G., Sheikh, K. M., Summerlin, W. T.**
Foetal-associated Material: Its Expression in Longterm Cultured Human Skin 149

**McEvoy, R. C., Lazarow, A., Hegre, O. D.**
Organ Culture of Foetal Rat Pancreas. Effects of Parabiotic Culture with Foetal Adrenal Glands 69

**Nevo, A. C., Weisman, Z., Sadé, J.**
Cell Proliferation and Cell Differentiation in Tissue Cultures of Adult Muco-ciliary Epithelia 79

**Olsen, I.**, s. Harris, G., et al. 99

**Pays-De Schutter, A.**, s. Brachet, J., et al. 3

**Potten, C. S., Allen, T. D.**
Control of Epidermal Proliferative Units (EPUs). An Hypothesis Based on the Arrangement of Neighbouring Differentiated Cells 161

**Radu, I., Voisin, G. A.**
Ontogenesis of Spermatozoa Autoantigens in Guinea Pigs 107

**Rizki, R. M., Rizki, T. M.**
Morphogenic Effects of Halogenated Thymidine Analogues on Drosophila. VI. Causal Analysis of Bromodeoxyuridine Induced Growth Lesions 133

**Rizki, T. M.**, s. Rizki, R. M. 133

**Rowden, G.**, s. Lewis, M. G., et al. 149

**Sadé, J.**, s. Nevo, A. C., et al. 79

**Schmidt, A. J., Woerthwein, K. F.**
Localization of 5'-Ribonucleotide Phosphohydrolase in Regenerating (and Normal) Limb Tissues of the Adult Newt *Nctophthalmus viridescens* 29

**Sheikh, K. M.**, s. Lewis, M. G., et al. 149

**Sherman, M. I.**
Long Term Culture of Cells Derived from Mouse Blastocysts 51

**Stocum, D. L.**
Outgrowth and Pattern Formation during Limb Ontogeny and Regeneration 167

**Sturdee, A., Connock, M.**
The Embryonic Limb Bud of the Urodele: Morphological Studies of the Apex 43

**Summerlin, W. T.**, s. Lewis, M. G., et al. 149

**Ubbels, G. A.**, s. Klag, J. J. 15

**Unsworth, B. R., Kaulenas, M. S.**
Changes in Ribosome-associated Proteins during Sea Urchin Development 21

**Voisin, G. A.**, s. Radu, I. 107

**Walford, E. M,.** s. Harris, G., et al. 99

**Weisman, Z.**, s. Nevo, A. C., et al. 79

**Woerthwein, K. F.**, s. Schmidt, A. J. 29